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EXAMINER

VO, THANH DUC

ART UNIT PAPER NUMBER

2189

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS | 03/22/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/813,537

Applicant(s)

MARTINEZ, ALBERTO J.

Examiner

Thanh D. Vo

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This Office Action is responsive to the Amendment filed on November 9, 2006. Claims 1-16 are presented for examination. Claims 1-16 are pending. All rejections or objections not repeated below are withdrawn.

Drawings

2. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 14-16 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

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On page 11, paragraph 0028 of the specification has provided evidence that applicant intends the medium to include a signal (i.e. radio frequency link) as such the claim is drawn to a form of energy. Energy is not one of four categories of invention and therefore this claim is not statutory. Energy is not a series of steps or acts and thus is not a process. Energy is not a physical article or object and as such is not a machine or manufacture. Energy is not combination of substances and therefore not a composition of matter.

All dependent claims are rejected as having the same deficiencies as the claims they depend from.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-7 and 11-16 are rejected under 35 U.S.C. 102(a) as being anticipated by Watt et al. (hereinafter Watt) of U.S. Publication No. US 2004/0148480 A1.

As per claim 1, Watt substantially disclosed a method comprising:

storing data in a memory device (see page 1, paragraph 0004, lines 4-6);

writing a pointer related to a location of the data to a known location (see page 1, paragraph 0016, lines 6-11, *wherein the address is related to the location of the data in a secured domain*);

indicating the data has a protected status (see page 2, paragraph 0029, *wherein the data in the secured memory is protected and inherently comprising a protected status*); and

preventing a read of the pointer from the known location. See page 25, paragraph 00452, lines 2-8, paragraph 0453, lines 24-32, and paragraph 00454, lines 10-24.

As per claim 2, Watt substantially disclosed a method further comprising:

returning a fixed value in response to a read request for the pointer. See Fig. 57, blocks 2730, 2735, and 2740. *The access is aborted as soon as it is trying to access a secured data and it is a predetermined (fixed) value in responsive to the read request.*

As per claim 3, Watt substantially disclosed a method, wherein the known location is a register in a memory controller. See page 1, paragraph 0015.

As per claim 4, Watt substantially disclosed a method further comprising:

storing the location of the data in a descriptor list table, wherein the pointer indicates the location of the descriptor list table. See page 21, paragraph 0424.

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As per claim 5, Watt substantially disclosed a device comprising:

a first memory device to store a pointer to a descriptor list table (see page 1, paragraph 0015);

a second memory device to store an indicator of a protected status (see page 1, paragraph 0015, wherein the memory region is secured/protected region); and

a control circuit to prevent a read of the pointer. See page 25, paragraph 0453.

As per claim 6, Watt substantially disclosed a device further comprising:

an output circuit to generate a fixed output when the pointer has a protected status. See Fig. 57, blocks 2730, 2735, and 2740. *The access is aborted as soon as it is trying to access a secured data and it is a predetermined (fixed) value in responsive to the read request.*

As per claim 7, Watt substantially disclosed a method, wherein the known location is a register in a memory controller. See page 1, paragraph 0015.

As per claim 11, Watt substantially disclosed a device comprising:

means for receiving a request for a location of data (page 4, paragraph 0102);

means for determining a protected status of the data (See Fig. 55 and its description on paragraphs 0527-0528 of how the flag is used to indicated if the data is secured or non-secured, and page 13, paragraph 0279 of how the core accesses those data, therefore it has to have a mean to determine the secured mode); and

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means for returning a predetermined signal if the data has a protected status.

See Fig. 57, blocks 2730, 2735, and 2740. *The access is aborted as soon as it is trying to access a secured data and it is a predetermined (fixed) value in responsive to the read request.*

As per claim 12, Watt substantially disclosed a device further comprising:

means for storing an indicator of the protected status. See Fig. 55, and page 13, paragraph 0279. *The mean of storing an indicator is inherited since an indicator is a variable that requires a storage area such as a register to hold the value.*

As per claim 13, Watt substantially disclosed a device, further comprising:

means for returning a location of the data if the data has an unprotected status.

See page 1, paragraph 0014.

As per claim 14, Watt substantially disclosed a machine readable medium having instructions stored therein which when executed cause a machine to perform a set of operations comprising:

receiving a request for descriptor table base address (see page 1, paragraph 0015);

determining if the descriptor table base address register is set in a protected mode data (See Fig. 55 and its description on paragraphs 0527-0528 of how the flag is

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used to indicated if the data is secured or non-secured, and page 13, paragraph 0279 of how the core accesses those data); and

returning a fixed value if the register is in the protected mode. See Fig. 57, blocks 2730, 2735, and 2740. *The access is aborted as soon as it is trying to access a secured data and it is a predetermined (fixed) value in responsive to the read request.*

As per claim 15, Watt further disclosed a machine readable medium having instructions stored therein which when executed cause a machine to perform a set of operations further comprising:

storing an indicator of the protected mode. See Fig. 55, and page 13, paragraph 0279. *The mean of storing an indicator is inherited since an indicator is a variable which requires a storage area such as a register to hold the value.*

As per claim 16, Watt further disclosed a machine readable medium having instructions stored therein which when executed cause a machine to perform a set of operations further comprising:

returning the descriptor table base address if the data is not in the protected mode. See page 1, paragraph 0014.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watt et al. (hereinafter Watt) of U.S. U.S. Publication No. US 2004/0148480 A1 in view of England et al. (hereinafter England) of U.S. Publication No. US 2004/0044906 A1 or Applicant Admitted Prior Art (hereinafter AAPA).

As per claim 8, Watt disclosed a system comprising:

a memory device (See Fig. 1, item 56);

a processor (See Fig. 1, item 10);

a memory controller (Fig. 1, item 30) coupled to the memory device 56 and processor 10, the memory controller 30 to store a pointer to a descriptor list table and to prevent a read of the pointer when the pointer is in a protected mode (see page 1, paragraph 0016, see page 2, paragraph 0029; and see page 25, paragraph 00452, lines 2-8, paragraph 0453, lines 24-32, and paragraph 00454, lines 10-24 which further re-enforce the previous rejection); and

Watt failed to disclose an integrated audio controller coupled to the memory controller to process audio data.

England disclosed an integrated audio controller coupled to the memory controller to process audio data. See page 3, paragraph 0029. In addition, AAPA also disclose an audio controller to process the audio data. See page 2, paragraph 0004.

Watt and England and AAPA are from the same field of endeavor, data protection and encryption.

At the time of the Applicant's invention it would have been obvious to one having an ordinary skill in the art to modify the system of Watt to combine with the audio controller of England or AAPA.

The motivation of doing is to enable the system of Watt to process the audio data received from different audio media using the audio controller to output the necessary audio content that would be used of useful to the user.

Therefore, it would have been obvious to one having an ordinary skill in the art at the time of the Applicant's invention to implement the audio controller of England or AAPA to arrive at that the claimed invention.

As per claim 9, Watt failed to disclose a system further comprising:
a removable media drive coupled to the memory controller to read encrypted data.

AAPA disclosed a removable media drive to play back the encrypted data from a removable medium. See page 2, paragraph 0004.

Watt and AAPA are from the same field of endeavor, data encryption and piracy prevention.

At the time of the Applicant's invention it would have been obvious to one having an ordinary skill in the art to modify the system of Watt to combine the removable media drive disclosed in AAPA.

The motivation of doing so is to enable the user to read, listen, or view the encrypted content that was previously recorded or stored in a removable medium and playing back the content as it is requested by the user.

Therefore, it would have been obvious to one having an ordinary skill in the art at the time of the Applicant's invention to implement a removable media drive as disclosed in AAPA with the system of Watt in order to arrive at the invention claimed in claim 9.

As per claim 10, Watt failed to disclose a system further comprising:
a graphics device to display the encrypted data from the removable media drive.
England disclosed a monitor to display the data to the user.

Watt and England are from the same field of endeavor, data encryption and piracy protection.

At the time of the Applicant's invention it would have been obvious to one having an ordinary skill in the art to recognize that a graphical interface device is useful to display any form of graphic data.

The motivation of doing is to enable the user to view the data content that are previously recorded or stored in any type of storage medium on a monitor.

Therefore, it would have been obvious to one having an ordinary skill in the art at the time of the Applicant's invention to implement a graphic device as disclosed by England with the system of Watt in order to arrive at the invention claimed in claim 10.

Response to Arguments

Applicant's arguments filed November 9, 2006 have been fully considered but they are not persuasive.

6. With respect to the objection to drawing of Figure 1, although the system memory 113 labeled in Figure is further digested in subsequent illustration; however, a computer system as illustrated in Figure 1 that has a system memory is old and well known in the art. In addition, paragraph [0012] on the Detailed Description of the current invention does not elaborate what is constituted as new in the system memory 113 of Figure 1 of the current invention; therefore a system memory in a computer system is old and well known in the computer art.

7. With respect to 35 USC 101 Rejection of claims 14-16:

Examiner indicated in the previous rejection that on page 11, paragraph 0028 of the specification has provided evidence that applicant intends the medium to include a signal (i.e. radio frequency link) as such the claim is drawn to a form of energy. Energy is not one of four categories of invention and therefore this claim is not statutory. Energy is not a series of steps or acts and thus is not a process. Energy is not a physical article or object and as such is not a machine or manufacture. Energy is not combination of substances and therefore not a composition of matter.

8. With respect to claims rejections under 35 USC 102, Applicant argues that Watt does not discloses following:

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- a) "preventing a read of the pointer" in claim 1.
- b) "means for determining a protected status of data" in claim 11
- c) "determining if the descriptor table base address register is set in a protected mode" in claim 14.

With respect (a), the disclosure indicated in claim 1 with the addition cited limitations which further make clear and enforce the previous rejection. In addition, Applicant asserts that Examiner has made a piecemeal rejection of the claims relying on disparate portions of the cited reference. Examiner respectfully disagrees; all of the limitations cited by Examiner from Watt are correspondingly related to each other although they are not being disclosed closely to each other. Watt invention directs to a virtual to physical memory mapping within a system having secure domain and a non-secure domain (See Fig. 3), wherein the data are stored within those domains. Figures 39-46, 51, 52, and 55 and their corresponding descriptions further teach the method of accessing the secure domain and how it is protected using the descriptor (Fig. 55, item 435).

With respect to (b), the system of Watt is directed to a secured memory domain, therefore there has to be a means to determine if the data is secured or protected. Additional limitations cited from Watt are presented above (in claim 11) to further enforce the previous rejection.

With respect to (c), Examiner relies on the argument from (b) and additional limitations cited from Watt are presented above (in claim 14) to further enforce the previous rejection.

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9. With respect to 35 USC 103 Rejection of claim 8, Applicant asserts that Watt does not teach a memory controller having a pointer in a descriptor table. Examiner disagrees, Watt clearly teach a descriptor table (Fig. 42, item 405) that stores all of the descriptors that points to a secure page.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh D. Vo whose telephone number is (571) 272-0708. The examiner can normally be reached on M-F 9AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Reginald G. Bragdon can be reached on (571) 272-4204. The fax phone

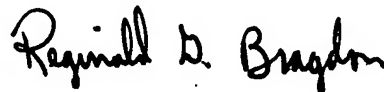
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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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3/15/2007



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